

REMARKS

Claims 6-9 remain pending. Claims 1-5 were canceled without prejudice and, as such, are not discussed herein.

Claim Rejections - 35 U.S.C. §112, second paragraph

Claim 7 was rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. The Examiner contends that the limiting effect of a rubber having a low melting point is unclear. Applicant makes the following comments with reference to the application as published in US 2004/0239001.

Paragraph 45 states that “The cuff 100 is made of a rubbery component with a low melting point, so that the over moulding process **will not adversely affect the integrity of a conduit 29**” (emphasis added)

Conduits such as conduit 29 are well known in the art and are manufactured from thin walled plastic. Consequently, they are relatively fragile. It is clear that a person of ordinary skill in the art would know to choose a rubber compound for forming the cuff that has a melting point low enough to avoid excessive damage to the conduit. That is, rubber with a melting point low enough to avoid damage that would threaten the integrity of the conduit.

Applicants request that the Examiner note that minor damage to that part of the conduit **underneath** the cuff is acceptable, as this would not unduly effect the conduit integrity.

Therefore, Applicants submit that a person of ordinary skill in the art understands the limiting effect of the limitation. Withdrawal of the rejection is requested.

Claim Rejections - 35 U.S.C. §102

Claims 6-9 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by United States Patent No. 2,733,734 to Woodward. Reconsideration and withdrawal of this rejection is requested.

Claim 6 specifies “a) over moulding a soft, flexible rubber cuff onto said conduit proximal to the end of said conduit, causing said cuff to blend with said conduit”. Over moulding as it is understood by one of ordinary skill in the art is a form of injection moulding. That is, the material that forms the rubber cuff is injected into a mould surrounding the end of the conduit, in a liquid or semi-liquid state. It is then allowed to solidify.

That these are processes by which the cuff and connector are formed would be clearly understood by one of ordinary skill in the art reading the disclosure of the present invention.

In contrast, Woodward describes a forming method where the tube a' is **wrapped** with a second layer a², and then **wrapped** with a third layer of material a³. The separate “connector” (cuff e) is then prepared and attached to the end of the conduit a, as described in Col. 2, lines 30-51. The two parts that form the “connector” and the “conduit” are formed separately, and are then mechanically connected to one another as part of the forming process. At no point is a **moulding** process discussed or suggested. There is no indication that these two parts are bonded to one another by any sort of process requiring heat, melting of the constituent parts, or both.

Applicants request that the Examiner note that although vulcanization is mentioned, this a process intended to change the structural composition of a rubber material without necessarily melting it or changing the overall structure or outer shape. It is not clear from the context of the specification that this process is not used to form any of the parts of the hose of Woodward.

Therefore, Applicants submit that Woodward does not anticipate and cannot be modified to render obvious the invention as specified in independent claim 6. Reconsideration and allowance is requested.

With regard to claim 7, Applicants submit that Woodward does not disclose or suggest that the rubber material has to have a low melting point. In Woodward, the rubber material is intended to protect and not damage a heat sensitive conduit. With regard to claims 8 and 9, Woodward does not disclose or suggest that the conduit is helically formed, or that it includes an electrical conductor (the “wires c” are intended for structural strength -- “The reinforcement consists of . . .”, Col. 2, line 25), or that it includes a bead.

Therefore, Applicants submit that Woodward does not anticipate, and does not render obvious, claims 7-9. In addition, claims 7-9 are dependent upon claim 6, which Applicants submit is allowable. Therefore, Applicants submit that claims 7-9 are allowable. Reconsideration and allowance is requested.

Claims 6-9 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. publication No. 2003/0236015 to Edirisuriwa, published December 25, 2003, now United States Patent No. 6,953,354 B2. Reconsideration and withdrawal of this rejection is requested.

In the method specified in independent claim 6, there are three main components used therein:

1. The conduit 29,
2. The rubber cuff 100, and
3. The connector 33.

It is clear that the Examiner considers portions of the device disclosed in Edirisuriwa to be equivalent to these three components, namely:

1. Conduit 403 of Edirisuriwa to be equivalent to conduit 29 of the present claims,
2. Insert 401 of Edirisuriwa to be equivalent to cuff 100 of the present claims, and
3. Over covering 407 of Edirisuriwa to be equivalent to connector 33 of the present claims.

Applicants submit that it is clear from reading Edirisuriwa that insert 401 is formed in a completely separate manufacturing operation, and the end of the conduit is then attached “by threading the conduit about the end 404” (paragraph 71 of Edirisuriwa). The outer covering 407 is then over moulded onto the top of the conduit 403 and the insert 401. Applicants request that the Examiner note that:

- Insert 401 is formed in a separate manufacturing operation and is not “soft rubber” as is required in independent claim 6. Insert 401 is a rigid plastic. Furthermore, insert 401 is not over moulded onto the conduit end.
- There is no indication that any of these pieces are intended to protect any of the outer pieces from excessive heat.
- The outer covering 407 does not blend with or “becom[e] an integral part of the inner surface” of the end 404.

Therefore, Applicants submit that Edirisuriwa does not anticipate and cannot be modified to render obvious the invention as specified in independent claim 6. Reconsideration and allowance is requested.


Claims 7-9 are dependent upon claim 6, which Applicants submit is allowable.

Therefore, Applicants submit that claims 7-9 are allowable. Reconsideration and allowance is requested.

Should the Examiner have any questions regarding this Amendment, the Examiner is invited to contact one of the undersigned attorneys at (312) 704-1890.

Respectfully submitted,

Dated: MAY 14, 2007

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